St. Stephen's C of E Primary School Design and Technology Overview 2026 - 2027

Mechanical systems | Structures | Textiles | Food technology | Electrical systems | Electronic systems | CAD

Year	Autumn	Spring	Summer
EYFS	Structures: Design and make salt dough candle holders	Mechanical systems: Junk model vehicle	Food technology: Flatbreads Textiles: Sock puppets to tell a story
1	Textiles: Design and make a puppet to tell a story.	Structures: Design and make a stable structure for small world characters.	Food Technology: Design and make a tropical fruit salad for a class picnic
2	Mechanical systems: Design and make a greeting/celebration card using levers and sliders.	Mechanical systems : Design and make a vehicle with axles, wheels, and chassis that is strong and stable.	Food Technology: Design and make various healthy, savoury foods for a class party
3	Mechanical systems: Design and make a mechanism using levers and linkages.	Mechanical systems: Design and make a structure which uses pneumatics to make an object move.	Food technology: Design and make a pizza for a class party.
4	Textiles: Design a 2D shape and use this template to create a 3D product out of fabric.	Food technology: Design and make a hot pasta dish for a family lunch.	Electrical systems: Design and make a structure to hold an electrical circuit (nightlight)
5	Food technology: Design and make a hot frittata, which combines ingredients that compliment each other, creating a healthy and nutritious dish.	Mechanisms: Mechanical Structures. Construct a pop-up cam toy within a stable structure. Electrical systems: Design and use 'Crumble' programmers (using selection) to programme and control lights in a nightlight, using output processes.	Textiles: Design and make a pouch to hold an object.
6	Food Technology: Street food - Design and make hot empanadas	Computer Aided Design: Design a keyring using Tinkercad (CAD software).	Revisit Computer Aided Design: Design a mechanism to pick up litter using Tinkercad (CAD software). Electrical systems: Design and create a product, which can be used to tidy up litter from a class party.

Year Group Skills (mapped to NC)

Year 1 and 2

I can:

Design

-design purposeful, functional, appealing products for themselves and other users based on design criteria.

- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.

Make

-select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing].

-select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.

Evaluate

-explore and evaluate a range of existing products.

-evaluate their ideas and products against design criteria.

Technical knowledge

-build structures, exploring how they can be made stronger, stiffer and more stable.

-explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

Cooking and nutrition

-use the basic principles of a healthy and varied diet to prepare dishes.

-understand where food comes from.

Year 3, 4, 5 and 6

I can:

Design

-use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.

-generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.

Make

- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.

-select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.

Evaluate

- investigate and analyse a range of existing products.

- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.

- understand how key events and individuals in design and technology have helped shape the world.

Technical knowledge

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures.

- understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages].

- understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors].

- apply their understanding of computing to program, monitor and control their products.

Cooking and Nutrition

- understand and apply the principles of a healthy and varied diet.

- prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.

- understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.